

## ABSTRACT OF THE DISCLOSURE

A pair of edges that are located at ends as viewed in the widthwise direction of a design pattern are recognized. On the basis of the edge direction in which the paired edges are recognized, edge points on the design pattern are detected as sub-pixels. The widthwise dimension of the design pattern is calculated on the basis of the edge points. In addition, the widthwise dimension of a circuit pattern is calculated at the same position as the widthwise dimension of the design pattern. On the basis of the calculated widthwise dimensions, the semiconductor wafer circuit pattern is checked.

5  
10

TOP SECRET